

DECLARATION OF SASHIKANTH CHANDRASEKARAN AND ASHOK SAXENA UNDER 37 C.F.R. § 1.131

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

We, Sashikanth Chandrasekaran and Ashok Saxena, hereby declare as follows:

- 1. We are co-inventors of the invention described in the above application.
- 2. At the time we invented the subject invention, we were employed as software and technology developers at Oracle Corporation.
- 3. As evidenced by the document attached to this affidavit as Exhibit A, prior to January 15, 1999, we had conceived and diligently reduced to practice the subject matter of the above application. Exhibit A is a portion of a Design Specification dated prior to January 15, 1999 which describes the design specification for implementing database tables and related structures for managing message data to be accessed by multiple recipients.
- 4. Section 2.2.4 of Exhibit A describes history management processes that are implemented in a software program that was created and reduced to practice prior to January 15, 1999 which embodied the subject matter of the above application. This section discloses history management of information for multiple consumers, where the information includes one or more

information records in order from one or more queues. Section 2.2.4 describes the provision of data from information records to consumers, e.g., by de-queuing a message. This section also describes updating a history table which includes records for the consumers.

- 5. Section 3.4.1 of Exhibit A describes database fields that are employed to manage history information for the processing of messages, as well as procedures for proving to users and updating such information. Specific information to track for history records are also provided in this section. The fields used to manage the history information includes at least one field that indicates whether a data item has been provided to a consumer, which is updated when a consumer accesses the information (e.g., by updating the "consumer_name" field with the name of the agent (recipient) that dequeued the message). This database structure was implemented in a software program that was created and reduced to practice prior to January 15, 1999 which embodied the subject matter of the above application.
- 6. Section 3.4.2 of Exhibit A describes an algorithm to update and manage index records relating to the messages and message recipients. This process was implemented in the software program that was created and reduced to practice prior to January 15, 1999 which embodied the subject matter of the above application.
- 7. The subject invention was reduced to practice and tested to verify that it works for its intended purpose prior to January 15, 1999. Exhibits B-F include copies of documents which evidence that the subject invention was tested and found to work for its intended purpose.
 - 8. Exhibit B is a copy of a driver script which invokes the other SQL test scripts.
- 9. Exhibit C is a copy of a script that was used to create multiple consumers queues based on the subject invention.
- 10. Exhibit D are copies of scripts that perform operations such as enqueuing and dequeuing of messages, as well as cleanup of the queue tables.
- 11. Exhibit E are copies of the outputs generated by the test scripts of Exhibits B-D.
- 12. Exhibit F are copies of documents showing successful tests of the above scripts. Regression tests were performed to verify that the operations performed by the test scripts generate the specified output. The documents in Exhibit F are copies of files that display the results of running the tests and demonstrate that the tests ran correctly with the expected results.
- 13. We further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Patent 237/116 OI7011472001

Date: Mar 14 2006

- Auturn

Sashikanth Chandrasekaran

Patent 237/116 OI7011472001

Date: March 10, 2016

Ashok Saxena

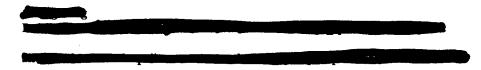
Design Specification for AQ Propagation, **RDBMS**, 8.1

Project ID: aq_propagation

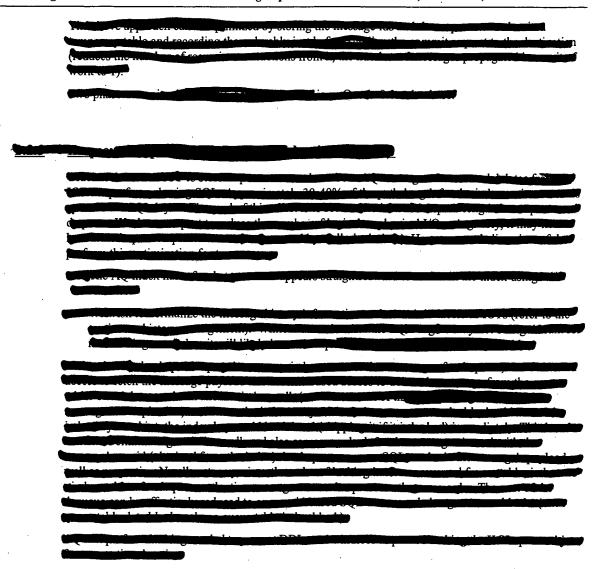
Version:

Status: Approved

Author: Sashi Chandrasekaran, Ashok Saxena



Version	Reviewers	Changes
	arsaxena	Creation



2.2.4 History Management

History management for multi-consumer queues leaves a lot to be desired. There are two fundamental problems to history management: storage and reference counting.

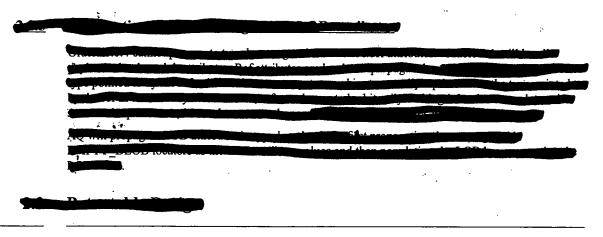
Storage

The history information is stored as a varray object collection. The current interface to varray collections retrieves and unpickles the entire collection. AQ uses C interfaces to navigate through the collection and update the history element for the appropriate consumer. The updated collection is written entirely into the database for history tracking.

• Reference Counting

In Oracle 8.0.4 a reference count is maintained as a separate column with each message. Dequeuers decrement the reference count and the last dequeuer (that finds the reference count to be zero) deletes the message from the queue table. Needless to say when several consumers are trying to dequeue the same messages a convoy will quickly form behind the reference count hotspot. We intend to eliminate the hot spot by de-coupling the reference counting from the dequeuers by entrusting the queue monitor with the task of performing the garbage collection (i.e delete messages that have been dequeued by all consumers). It already performs the task of deleting messages that have expired.

We propose to keep the history information in a separate IOT. This will reduce the contention among the multiple consumers to update the history and eliminate the need to lock the queue table entry for the message. The time manager index will be enhanced and the time manager's responsibilities will be increased to update the state of the message to "PROCESSED". If the queue has a non-infinite retention time, the time-manager will not update the state of the message to processed. Instead, the time-manager will only remove the message when the retention time is complete. This is not a problem because the state of the message can de deduced from the history entries in the history IOT. When a message is dequeued by a consumer, its entry in the message table is updated to the new removal time (current time + retention). When the time manager encounters this entry it will check the history and if all recipients have processed the message it will remove the message from the queue table and also the history rows. Since the history IOT is indexed on message id as the leading primary key the time manager can efficiently determine the status of a message.



3.4 History Management

3.4.1 Data Structures

When a queue table is created, three additional IOTs are created to store the message meta data. The message data and message properties are kept in the queue table. The queue table in 8.1 will be modified for changes in message properties, but they are not relevant to the history management. The three additional IOTs are:

- A dequeue index to maintain the sort-order of messages for each recipient. This index will have the same structure as in Oracle 8.0.
- A history index that maintains the history of processing of every message. The columns in this IOT are as follows:
 - a. msgid unique identifier of the message
 - b. rowid location of the message in the queue table.
 - c. address address of the recipient.

It is the source queue name (without the schema name appended to it) if the consumer will dequeue messages directly from the source queue. The address supported by AQ propagation will be of the form [schema.]queue[@database_link]. Messages are propagated to the destination queue specified by the address. AQ does not require global names be set to TRUE, however it is recommended. The database link name is resolved in the context of the owner of the source queue.

d. protocol - protocol field of the recipient structure.

This field qualifies the address. It is the session-level protocol (e.g. dblink/TIB) used to propagate messages to the destination queue. It is 0 if the address is a database link address or if the consumer dequeues the message from the local queue.

- e. consumer_name name of the agent (recipient) that dequeued the message.
- f. txn_id transaction id of the dequeuing transaction.
- g. deq_time time of dequeue.
- h. deq user database schema id of dequeuer.
- j. propagated msgid message id of the enqueued message in the destination queue.

This is NULL if the address is NULL.

k. retry count - # times message was dequeued in remove mode (and aborted).

Columns a, c, d and e form the primary key. We may choose to include the other columns also as part of the primary key to simplify access to these columns (Key columns are easier to extract than non-key columns and also do not have the complexity of an overflow segment). Key-compression will not be used since we do not expect the prefix (msgid) to be repeated often.

- A time-manager index that maintains the list of time-management activities. The time-manager index has four columns:
 - a. time absolute time at which time-manager has to perform an operation.

- b. msgid message id of message that needs to be acted upon.
- c. action a description of the action that needs to be performed. The possible values are:
 - 1. MAKE_READY make message available for dequeue to consumers after the delay time has passed.
 - 2. EXPIRE move message to exception queue if message has not yet been processed.
 - 3. REMOVE remove message after the retention time has passed.
- d. transaction_id. This is the transaction_id of the transaction that inserts the time-management entry. This is needed to generate a unique key, since two consumers can dequeue the same message and post the time-manager to perform an action at the same time. This is set if the action is REMOVE.

Columns a, b and d form the primary key. This IOT is similar to the time-manager index for Oracle 8.0 queue tables. The differences are:

- a. The IOT stores the msgid of the message rather than its rowid.
- b. There is an action column to help the time-manager determine what time-management activity needs to be performed on the message. In theory, this column is superfluous because the time-manager can deduce what action needs to be performed based on the history information in the historytable. Oracle 8.0's time-manager index deduced what action needs to be performed based on the state of the message in the queue table.
- c. There could be multiple rows for the same message in the index. In fact, there could be up to one row for each agent that dequeues the message from the queue table. This is because each agent that dequeues messages independently notifies the time-manager without knowledge of the state of the message with respect to other recipients.

3.4.2 Design Description

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We illustrate the use of these index structures using a simple example. Let us assume that a queue table, say qt, has been created. Call the dequeue sort order index qt_i, the history index as qt_h and the time-manager index as qt_t. Let us say a message is enqueued in queue q with the following properties: messageid = m, delay = d, expiration = e, retention time = r, recipients = {r1, r2@boston} where r1 is a local consumer and boston is a remote database. The acknowledgment mode for this message is assumed to be ACK_DEQUEUED (a propagator and dequeuer perform similar actions if the acknowledgment mode is ACK_PROPAGATED or NO_ACK).

When the message is enqueued at rowid = rid, the index structures are updated as follows:

- 1. insert one key into qt_i for the propagator. This step is identical to Oracle 8.0. This step is necessary so that the propagator can dequeue the message without waiting for the delay time.
- 2.Ifdisnon-NULLinsertkeyintoqt_twithvalue[d,m,MAKE_READY,txnid]elseifeisnon-NULL insert key into qt_t with value [e, m, EXPIRE, txnid]
- 3. array insert two keys into qt_h with values [m, rid, r2@boston, 0, r2, NULL, O]. This step will substitute generating the history collection in an 8.0 queue table.

When the delay time has passed the time-manager performs the following actions.

- 1. for each entry in qt_h where msgid = m and address = q and txn_id = txnid insert key into qt_i to enable consumer to dequeue message.
- 2. update the qt_t key to [e, m, EXPIRE, cur_txnid] if e is non-NULL.

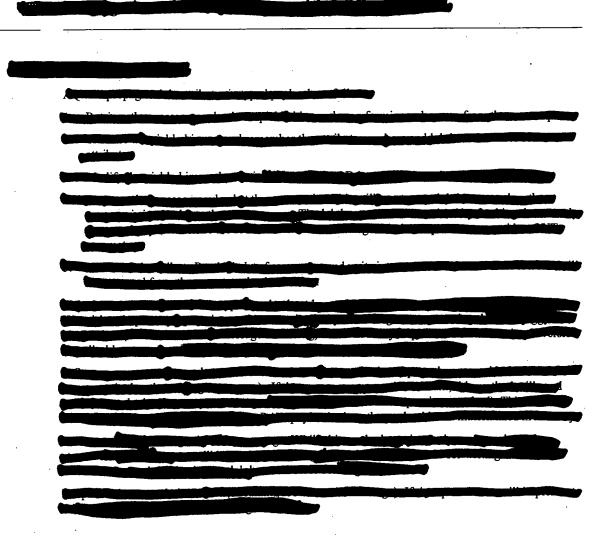
Agent r1 performs the following steps after dequeuing message m.

1. Delete its index entry from qt_i.

- 2. Update deq_time, deq_user, txn_id columns in qt_h for row with consumer_name = r1.
- 3. If retention_time is not NULL, insert key [r, m, REMOVE, cur_txnid] into qt_t else if queue has no retention, insert key [gettimeofday(),m, REMOVE, cur_txnid].

The propagator updates the propagated_msgid column in qt_h and deletes the index entry from qt_i as soon as m is successfully propagated to boston. The deq_time column in qt_h and time_manager index qt_t are updated only on receipt of acknowledgment from boston that r2 has processed the message.

The time-manager marks the message as expired at time e, if either r1's or r2's deq_time columns in qt_h is NULL. Likewise, it removes the message m at time r only if r1 and r2 deq_time columns are non-NULL. In all cases the time-manager removes the index entry from the time-manager-index when it processes the entry, regardless of whether processing it resulted in any state change or not. When a message expires, the history keys in qt_h are copied over to a different queue table if the exception queue resides in a different queue table. The history keys are deleted along with the message itself when the application uses dequeue-by-message-id to remove the message from the exception queue.



```
tkaqnsbd.tsc
###
#
#
#
        tkagnsbd.tsc - Advanced Queueing New-style Short Basic Dequeue test
#
#
      DESCRIPTION
#
        short regression test of 8.1 style multiconsumer queues
#
        tests creation, navigation, enqueue, dequeue
#
#
#
#
  RUNS_STANDALONE Yes
  TEST_TYPE
                     Short
# USES
                     SQL
# MAX_USERS
# open_cursors, shared_pool_size settings are temporary workarounds
rdbmsini 07_DICTIONARY_ACCESSIBILITY=true compatible=8.1.0 db_block_buffers=400
open_cursors=500 shared_pool_size=8000000
get tkaqnmin.sql
sql tkaqnmin > tkaqnsb1
compare tkagnsb1 tkagnmin mask
# Enqueue some messages and navigate thru the queues
get tkaqmnav.sql
sql tkaqmnav > tkaqnsb2
compare tkaqnsb2 tkaqmnav mask
# Dequeue some messages when there is more than one message for an application
# First create the messages in the queue.
get tkaqmbdm.sql
sql tkaqmbdm > tkaqnsb3
compare tkaqnsb3 tkaqmbdm mask
get tkaqnsd1.sql
sql tkaqnsd1 > tkaqnsb4
compare tkaqnsb4 mask
# Cleanup
get tkaqmcln.sql
sql tkaqmcln > tkaqnsb5
compare tkaqnsb5 mask
shutdown
```

```
Rem
Rem
Rem
Rem tkagnmin.sql
Rem
Rem
Rem
Rem
Rem
           tkagnmin.sql - <one-line expansion of the name>
Rem
        DESCRIPTION
Rem
           <short description of component this file declares/defines>
Rem
Rem
Rem
           <other useful comments, qualifications, etc.>
Rem
Rem
Rem
Rem
Rem
Rem
Rem
Rem
Rem
set echo on
connect sys/knl_test7 as sysdba
Rem
       Create a queue user and administrator
Rem
grant connect, resource, aq_administrator_role to tkaqadmn identified by tkaqadmn;
grant connect, resource, ag_user_role to tkaguser identified by tkaguser;
grant execute on dbms_aq to tkaquser; execute dbms_aqadm.grant_system_privilege('ENQUEUE_ANY','tkaquser',FALSE); execute dbms_aqadm.grant_system_privilege('DEQUEUE_ANY','tkaquser',FALSE); grant execute on dbms_aqadm to tkaquser;
execute dbms_aqadm.grant_system_privilege('MANAGE_ANY','tkaquser',TRUE);
grant execute on dbms_aq to tkaqadmn;
execute dbms_aqadm.grant_system_privilege('ENQUEUE_ANY', 'tkaqadmn', FALSE);
execute dbms_aqadm.grant_system_privilege('DEQUEUE_ANY', 'tkaqadmn', FALSE);
execute dbms_agadm.grant_type_access('tkagadmn');
Rem
Rem
       Create a type
create type message as object(id NUMBER, data VARCHAR2(30));
grant execute on message to tkaqadmn;
grant execute on message to tkaquser;
Rem TODO: the remaining SQL scripts must be executed as tkaqadmn
Rem connect tkaqadmn/tkaqadmn.
# Create a queue with default sort ordering
execute dbms_aqadm.create_queue_table(queue_table => 'sys.tkaqqtdef'
queue_payload_type => 'message', multiple_consumers => true, comment => 'Creating
queue table with default sort ordering', compatible => '8.1.3');
                                               Page 1
```

```
# Create a queue with priority and enq_time as the sort order
execute dbms_aqadm.create_queue_table(queue_table => 'sys.tkaqqtpeqt'
queue_payload_type => 'message', sort_list => 'priority,enq_time', multiple_consumers => true, comment => 'Creating queue with priority and enq_time sort order', compatible => '8.1.3');
# Create a queue with priority as the sort order
execute dbms_aqadm.create_queue_table(queue_table => 'sys.tkaqqtpri',
queue_payload_type => 'message', sort_list => 'priority', multiple_consumers =>
true, comment => 'Creating queue with priority sort order', compatible => '8.1.3');
Rem
           CHECK IF ALL'S OK
select schema, name, flags objno from system.aqs_queue_tables;
select orderbypos, colno, name, sort_order, table_objno from system.aq$_queue_table_sort order by table_objno, orderbypos;
Rem Ensure that the tables and the indices have been created
select count(*) from tkaqqtdef;
select count(*) from aq$_tkaqqtdef_i;
select count(*) from tkaqqtpeqt;
select count(*) from aq$_tkaqqtpeqt_i;
select count(*) from tkaqqtpri;
select count(*) from aq$_tkaqqtpri_i;
Rem create two queues in each queue table
Rem create two queues in tkaqqtdef
execute dbms_aqadm.create_queue(queue_name => 'q1def', queue_table =>
'sys.tkaqqtdef', max_retries => 2, comment => 'queue 1 in tkaqqtdef');
execute dbms_aqadm.create_queue(queue_name => 'q2def', queue_table =>
'sys.tkaqqtdef', max_retries => 2, comment => 'queue 2 in tkaqqtdef');
Rem create two queues in tkaggtpegt
execute dbms_aqadm.create_queue(queue_name => 'q1peqt', queue_table =>
'sys.tkaqqtpeqt', max_retries => 2, comment => 'queue 1 in tkaqqtpeqt');
execute dbms_aqadm.create_queue(queue_name => 'q2peqt', queue_table =>
'sys.tkaqqtpeqt', max_retries => 2, comment => 'queue 2 in tkaqqtpeqt');
Rem create two queues in tkaqqtpri
execute dbms_aqadm.create_queue(queue_name => 'q1pri', queue_table =>
'sys.tkaqqtpri', max_retries => 2, comment => 'queue 1 in tkaqqtpri');
execute dbms_aqadm.create_queue(queue_name => 'q2pri', queue_table =>
'sys.tkaqqtpri', max_retries => 2, comment => 'queue 2 in tkaqqtpri');
Rem create an exception queue in the tkaggtdef table
execute dbms_aqadm.create_queue(queue_name => 'exceptionq', queue_table =>
'sys.tkaqqtdef', queue_type => DBMS_AQADM.EXCEPTION_QUEUE, comment => 'exception q
in tkaqqtdef');
```

```
Rem Create procedure to check the list of subscribers for each queue
CREATE OR REPLACE PROCEDURE TKAQ_SUBSCRIBERS(qname VARCHAR2) AS
          dbms_aqadm.aq$_subscriber_list_t;
          BINARY_INTEGER;
nsubs
          BINARY_INTEGER;
begin
   subs := dbms_aqadm.queue_subscribers(qname);
   dbms_output.put_line(qname);
   dbms_output.put_line('----
  nsubs := subs.COUNT;
   FOR i IN 0..nsubs-1 LOOP
     IF subs(i) IS NOT NULL THEN
        dbms_output.put_line('--> ' || subs(i).name);
     END IF;
  END LOOP;
end TKAQ_SUBSCRIBERS;
CREATE OR REPLACE PROCEDURE TKAQ_HISTORY(enqmsgid RAW) AS
                    sys.aq$_history;
BINARY_INTEGER;
hist
nsubs
                    BINARY_INTEGER;
begin
  select history into hist
  from
           tkaqqtdef
  where msgid = enqmsgid;
  dbms_output.put_line('-----
  IF hist IS NOT NULL THEN
     nsubs := hist.COUNT;
     dbms_output.put_line(nsubs);
     FOR i IN 1...nsubs LOOP
       If hist(i) IS NOT NULL THEN
   dbms_output.put_line('APP --> ' || hist(i).consumer);
   IF hist(i).transaction_id IS NOT NULL THEN
    dbms_output.put_line('TXN --> ' || hist(i).transaction_id);
   dbms_output.put_line('DEQ_USER --> ' || hist(i).deq_user);
          ELSE
            dbms_output.put_line('TXN --> ');
          END IF;
       END IF;
    END LOOP;
  END IF;
  dbms_output.put_line('-----
end TKAQ_HISTORY;
Rem check subscribers for queues created
set serveroutput on
                                                Page 3
```

```
execute tkaq_subscribers('Q1DEF');
execute tkaq_subscribers('Q2DEF');
execute tkaq_subscribers('Q1PEQT');
execute tkaq_subscribers('Q2PEQT');
execute tkaq_subscribers('Q1PRI');
execute tkaq_subscribers('Q2PRI');
Rem add some default subscribers for each queue.
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app1_q1def', NULL, NULL);
dbms_aqadm.add_subscriber('sys.qldef',app1_qldef);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app2_q1def', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app3_q1def', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app4_q1def', NULL, NULL);
dbms_aqadm.add_subscriber('sys.qldef',app1_qldef);
declare
app1_q1def sys.aq$_agent;
app1_q1def := sys.aq$_agent('app5_q1def', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_qldef := sys.aq$_agent('app6_qldef', NULL, NULL);
dbms_aqadm.add_subscriber('sys.qldef',app1_qldef);
end;
declare
app1_qldef sys.aq$_agent;
app1_q1def := sys.aq$_agent('app1_q2def', NULL, NULL);
                                               Page 4
```

```
dbms_aqadm.add_subscriber('sys.q2def',app1_q1def);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app2_q2def', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q2def',app1_q1def);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app1_q1peqt', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1peqt',app1_q1def);
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app2_q1peqt', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1peqt',app1_q1def);
end;
declare
app1_qldef sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app1_q2peqt', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q2peqt',app1_q1def);
end:
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app2_q2peqt', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q2peqt',app1_q1def);
end;
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app1_q1pri', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1pri',app1_q1def);
declare
app1_q1def sys.aq$_agent;
begin
app1_q1def := sys.aq$_agent('app2_q1pri', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q1pri',app1_q1def);
end;
```

```
declare
appl_qldef sys.aq$_agent;
begin
appl_qldef := sys.aq$_agent('appl_q2pri', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q2pri',appl_qldef);
end;
//

declare
appl_qldef sys.aq$_agent;
begin
appl_qldef := sys.aq$_agent('app2_q2pri', NULL, NULL);
dbms_aqadm.add_subscriber('sys.q2pri',appl_qldef);
end;
//

Rem check subscribers for queues created

execute tkaq_subscribers('Q1DEF');
execute tkaq_subscribers('Q2DEF');
execute tkaq_subscribers('Q2PEQT');
execute tkaq_subscribers('Q1PEQT');
execute tkaq_subscribers('Q1PRI');
execute tkaq_subscribers('Q2PRI');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1def');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1pri');
execute dbms_aqadm.start_queue(queue_name => 'sys.q1pri');
execute dbms_aqadm.start_queue(queue_name => 'sys.q2peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q2peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q2peqt');
execute dbms_aqadm.start_queue(queue_name => 'sys.q2pri');
```

```
Rem
  Rem
  Rem
  Rem tkaqnsd1.sql
  Rem
  Rem
  Rem
  Rem
                      NAME
                            tkaqnsd1.sql - Advanced Queueing New-style Short Dequeue script
  Rem
  Rem
                      DESCRIPTION
  Rem
                            adapted from tkagnmbd1.sql, tkagnmbd2.sql (no synchronization)
  Rem
  Rem
  Rem
                             <other useful comments, qualifications, etc.>
  Rem
  Rem
  Rem
  Rem
  Rem
 Rem
  set echo on
  connect sys/knl_test7 as sysdba
  set serveroutput on
Rem now do dequeues
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app2_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app2_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app2_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app2_q2def');
execute tkaq_mbasicdeq('app1_q2def');
 Rem now do dequeues
 execute tkaq_mbasicdeq('app1_q2def')
 execute tkaq_mbasicdeq('app2_q2def')
execute tkaq_mbasicdeq('app2_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
 execute tkaq_mbasicdeq('app2_q2def');
 commit;
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
 execute tkaq_mbasicdeg('app1_q2def')
 execute tkaq_mbasicdeq('app1_q2def')
 execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app1_q2def');
```

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```
Rem
Rem $Header: tkaqmcln.sql 27-jul-97.13:41:57 nbhatt Exp $
Rem
Rem tkaqmcln.sql
Rem
Rem
Rem
Rem
          tkaqmcln.sql - <one-line expansion of the name>
Rem
Rem
        DESCRIPTION
Rem
          <short description of component this file declares/defines>
Rem
Rem
Rem
          <other useful comments, qualifications, etc.>
Rem
Rem
Rem
Rem
Rem
Rem
Rem
Rem
Rem
Rem TODO: The script must execute as tkaqadmn
Rem connect tkaqadmn/tkaqadmn
set echo on
connect sys/knl_test7 as sysdba
Rem cleanup the queue tables
execute dbms_aqadm.drop_queue_table('sys.tkaqqtdef', TRUE);
execute dbms_aqadm.drop_queue_table('sys.tkaqqtpeqt', TRUE);
execute dbms_aqadm.drop_queue_table('sys.tkaqqtpri', TRUE);
Rem connect as sys and drop the types connect sys/knl_test7_as sysdba
drop type message;
Rem disable aq logins
drop user tkaquser cascade;
drop user tkaqadmn cascade;
```

```
Rem
Rem
Rem
Rem tkaqmnav.sql
Rem
Rem
Rem
Rem
          tkaqmnav.sql - <one-line expansion of the name>
Rem
Rem
       DESCRIPTION
Rem
          <short description of component this file declares/defines>
Rem
Rem
Rem
          <other useful comments, qualifications, etc.>
Rem
Rem
Rem
Rem
Rem
Rem
Rem
Rem
set echo on
connect tkaquser/tkaquser
set serveroutput on
create or replace procedure tkaq_navenq(priority in number) as
enq_userdata sys.message;
enq_msqid
              raw(16);
              dbms_aq.enqueue_options_t;
engopt
              dbms_aq.message_properties_t;
msgprop
begin
enq_userdata := sys.message(priority, 'HELLO, WORLD!');
msgprop.priority := priority;
dbms_aq.enqueue('sys.q2pri', enqopt, msgprop, enq_userdata, enq_msgid);
end;
execute tkaq_navenq(1);
execute tkaq_navenq(2);
commit;
execute tkaq_navenq(3);
execute tkaq_navenq(4);
commit;
execute tkaq_navenq(5);
execute tkaq_navenq(6);
commit;
execute tkaq_navenq(7);
execute tkaq_navenq(8);
commit;
execute tkaq_navenq(9);
execute tkaq_navenq(10);
commit;
execute tkaq_navenq(11);
execute tkaq_navenq(12);
```

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```
commit;
execute tkaq_navenq(13);
execute tkaq_navenq(14);
commit;
execute tkaq_navenq(15);
execute tkaq_navenq(16);
create or replace procedure tkaq_navdeq(consumer IN VARCHAR2) as
deq_userdata sys.message;
             raw(16);
deq_msgid
             dbms_aq.dequeue_options_t;
degopt
             dbms_aq.message_properties_t;
msgprop
begin
deqopt.wait := DBMS_AQ.NO_WAIT;
degopt.consumer_name := consumer;
deqopt.navigation := DBMS_AQ.FIRST_MESSAGE;
deqopt.dequeue_mode := DBMS_AQ.BROWSE;
  FOR i in 1..9 loop
    dbms_aq.dequeue('sys.q2pri', deqopt, msgprop, deq_userdata, deq_msgid);
    dbms_output.put_line('Message:
                                       || deq_userdata.id
                                             || deq_userdata.data);
    commit;
    deqopt.navigation := DBMS_AQ.NEXT_MESSAGE;
  END LOOP;
end;
execute tkaq_navdeq('app1_q2pri');
execute tkaq_navdeq('app2_q2pri');
create or replace procedure tkaq_navdeq(consumer IN VARCHAR2) as
deq_userdata sys.message;
            raw(16);
deq_msgid
             dbms_aq.dequeue_options_t;
deqopt
msgprop
             dbms_aq.message_properties_t;
begin
degopt.wait := DBMS_AQ.NO_WAIT;
deqopt.consumer_name := consumer;
deqopt.navigation := DBMS_AQ FIRST_MESSAGE;
  FOR i in 1..19 loop
    dbms_aq.dequeue('sys.q2pri', deqopt, msgprop, deq_userdata, deq_msgid);
    dbms_output.put_line('Message:
                                         deq_userdata.id
                                             || deq_userdata.data);
    degopt.navigation := DBMS_AQ.NEXT_MESSAGE;
  END LOOP;
end;
execute tkaq_navdeq('app1_q2pri');
execute tkaq_navdeq('app2_q2pri');
```

```
Rem
Rem
Rem
Rem tkagmbdm.sql
Rem
Rem
Rem
Rem
Rem
          tkaqmbdm.sql - TK AQ Multiple dequeue Basic Deque with Multiple mesgs
Rem
        DESCRIPTION
Rem
          More than one message is enqueued per subscriber. Subscriber should
Rem
Rem
          skip messages locked by other subscribers
Rem
Rem
          <other useful comments, qualifications, etc.>
Rem
set echo on
connect sys/knl_test7 as sysdba
set serveroutput on
CREATE OR REPLACE PROCEDURE TKAQ_MBASICENQ(id IN NUMBER, text IN VARCHAR2) AS
msgprop
               dbms_aq.message_properties_t;
engopt
               dbms_aq.enqueue_options_t;
eng_msgid
               raw(16);
               message;
enq_userdata
begin
enq_userdata := message(id, text);
dbms_aq.enqueue(
        queue_name => 'sys.q2def',
        enqueue_options => engopt,
        message_properties => msgprop,
        payload => enq_userdata,
        msgid => enq_msgid);
end;
CREATE OR REPLACE PROCEDURE TKAQ_MBASICDEQ(subscriber
                                                         IN VARCHAR2) AS
                      dbms_aq.dequeue_options_t;
  dequeue_options
  message_properties dbms_aq.message_properties_t;
  deq_userdata
                     sys message;
  deq_msgid
                      raw(16);
begin
```

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```
dequeue_options.consumer_name := subscriber;
  dequeue_options.navigation := DBMS_AQ.FIRST_MESSAGE;
  dequeue_options.wait := 1;
  dbms_aq.dequeue(queue_name=> 'sys.q2def',
                   dequeue_options=>dequeue_options,
                  message_properties=>message_properties,
                  payload=>deq_userdata,
                  msgid=>deq_msgid);
  commit:
dbms_output.put_line('MESG-> ' || deq_userdata.id || ' ' || deq_userdata.data);
end;
Rem enqueue twelve messages each subscriber should get two.
execute tkaq_mbasicenq(1, 'First Message');
execute tkaq_mbasicenq(2, 'Second Message');
execute tkaq_mbasiceng(3, 'Third Message');
execute tkaq_mbasicenq(4, 'Fourth Message');
execute tkaq_mbasicenq(5, 'Fifth Message');
execute tkaq_mbasicenq(6, 'Sixth Message');
execute tkaq_mbasicenq(7, 'Seventh Message');
execute tkag_mbasiceng(8, 'Eight Message');
execute tkaq_mbasicenq(9, 'Ninth Message');
execute tkag_mbasiceng(10, 'Tenth Message');
execute tkaq_mbasicenq(11, 'Eleventh Message');
execute tkaq_mbasicenq(12, 'Twelveth Message');
execute tkaq_mbasicenq(13, 'Thirteenth Message');
execute tkaq_mbasicenq(14, 'Fourteenth Message');
execute tkaq_mbasiceng(15, 'Fifteenth Message');
execute tkaq_mbasicenq(16, 'Sixteenth Message');
execute tkag_mbasiceng(17, 'Seventeenth Message');
execute tkaq_mbasicenq(18, 'Eighteenth Message');
execute tkaq_mbasicenq(19, 'Nineteenth Message');
execute tkaq_mbasicenq(20, 'Twentyth Message');
execute tkaq_mbasicenq(21, 'Twentyfirst Message');
execute tkaq_mbasicenq(22, 'Twenty2nd Message');
execute tkaq_mbasicenq(23, 'Twenty3rd Message');
```

execute tkaq_mbasicenq(24, 'Twenty4th Message');
commit;

```
Echo
SVRMGR> connect sys/knl_test7 as sysdba
Connected.
SVRMGR>
SVRMGR>
SVRMGR> Rem
               Create a queue user and administrator
SVRMGR> Rem
SVRMGR>
SVRMGR>
SVRMGR> grant connect, resource, aq_administrator_role to tkaqadmn identified by
tkaqadmn;
Statement processed.
SVRMGR>
SVRMGR> grant connect, resource, aq_user_role to tkaquser identified by tkaquser;
Statement processed.
SVRMGR>
SVRMGR> grant execute on dbms_ag to tkaguser;
Statement processed.
SVRMGR> execute dbms_aqadm.grant_system_privilege('ENQUEUE_ANY','tkaquser',FALSE);
Statement processed.
SVRMGR> execute dbms_aqadm.grant_system_privilege('DEQUEUE_ANY', 'tkaquser', FALSE);
Statement processed.
SVRMGR> grant execute on dbms_aqadm to tkaquser;
Statement processed.
SVRMGR> execute dbms_aqadm.grant_system_privilege('MANAGE_ANY','tkaquser',TRUE);
Statement processed.
SVRMGR> grant execute on dbms_aq to tkaqadmn;
Statement processed.
SVRMGR> execute dbms_aqadm.grant_system_privilege('ENQUEUE_ANY', 'tkaqadmn', FALSE);
Statement processed.
SVRMGR> execute dbms_aqadm.grant_system_privilege('DEQUEUE_ANY','tkaqadmn',FALSE);
Statement processed.
SVRMGR> execute dbms_aqadm.grant_type_access('tkaqadmn');
Statement processed.
SVRMGR>
SVRMGR> Rem
SVRMGR> Rem
               Create a type
SVRMGR>
SVRMGR> create type message as object(id NUMBER, data VARCHAR2(30));
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> grant execute on message to tkagadmn;
Statement processed.
SVRMGR> grant execute on message to tkaquser;
Statement processed.
SVRMGR>
SVRMGR> Rem TODO: the remaining SQL scripts must be executed as tkaqadmn
SVRMGR> Rem connect tkagadmn/tkagadmn
SVRMGR>
SVRMGR> # Create a queue with default sort ordering
SVRMGR> execute dbms_aqadm.create_queue_table(queue_table => 'sys.tkaqqtdef';
queue_payload_type => 'message', multiple_consumers => true, comment => 'Creating
queue table with default sort ordering', compatible => '8.1.3');
Statement processed.
SVRMGR>
SVRMGR> # Create a queue with priority and enq_time as the sort order
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue_table(queue_table => 'sys.tkaqqtpeqt',
queue_payload_type =>'message', sort_list => 'priority,enq_time', multiple_consumers
=> true, comment => 'Creating queue with priority and enq_time sort order',
compatible => '8.1.3');
                                         Page 1
```

```
Statement processed.
SVRMGR>
SVRMGR> # Create a queue with priority as the sort order
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue_table(queue_table => 'sys.tkaqqtpri', queue_payload_type => 'message', sort_list => 'priority', multiple_consumers => true, comment => 'Creating queue with priority sort order', compatible => '8.1.3');
Statement processed.
SVRMGR>
SVRMGR> Rem
                   CHECK IF ALL'S OK
SVRMGR>
SVRMGR> select schema, name, flags objno from system.aq$_queue_tables;
                                       NĀME
                                        DEF$_AQCALL
SYSTEM
                                       DEF$_AQERROR
                                                                                           0
SYSTEM
                                       TKAQQTDEF
SYS
                                       TKAQQTPEQT
SÝS
SYS
                                       TKAQQTPRI
5 rows selected.
SVRMGR> select orderbypos, colno, name, sort_order, table_objno from
system.aq$_queue_table_sort order by table_objno, orderbypos; select orderbypos, colno, name, sort_order, table_objno from system.aq$_queue_table_sort order by table_objno, orderbypos
ORA-00942: table or view does not exist
SVRMGR>
SVRMGR> Rem Ensure that the tables and the indices have been created
SVRMGR> select count(*) from tkaqqtdef;
COUNT(*)
1 row selected.
SVRMGR> select count(*) from aq$_tkaqqtdef_i;
COUNT(*)
1 row selected.
SVRMGR>
SVRMGR> select count(*) from tkaqqtpeqt;
COUNT(*)
1 row selected.
SVRMGR> select count(*) from aq$_tkaqqtpeqt_i;
COUNT(*)
1 row selected.
SVRMGR>
SVRMGR> select count(*) from tkaqqtpri;
COUNT(*)
1 row selected.
SVRMGR> select count(*) from aq$_tkaqqtpri_i;
COUNT(*)
1 row selected.
SVRMGR>
SVRMGR> Rem create two queues in each queue table
```

```
SVRMGR>
SVRMGR> Rem create two queues in tkagqtdef
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'q1def', queue_table =>
 sys.tkaqqtdef', max_retries => 2, comment => 'queue 1 in tkaqqtdef');
Statement processed.
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'q2def', queue_table =>
 sys.tkaqqtdef', max_retries => 2, comment => 'queue 2 in tkaqqtdef');
Statement processed.
SVRMGR> Rem create two queues in tkaqqtpeqt
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'q1peqt', queue_table =>
'sys.tkaqqtpeqt', max_retries => 2, comment => 'queue 1 in tkaqqtpeqt');
Statement processed.
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'q2peqt', queue_table =>
'sys.tkaqqtpeqt', max_retries => 2, comment => 'queue 2 in tkaqqtpeqt');
Statement processed.
SVRMGR>
SVRMGR> Rem create two queues in tkaqqtpri
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'q1pri', queue_table =>
'sys.tkaqqtpri', max_retries => 2, comment => 'queue 1 in tkaqqtpri');
Statement processed.
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'q2pri', queue_table =>
'sys.tkaqqtpri', max_retries => 2, comment => 'queue 2 in tkaqqtpri');
Statement processed.
SVRMGR>
SVRMGR> Rem create an exception queue in the tkaqqtdef table
SVRMGR>
SVRMGR> execute dbms_aqadm.create_queue(queue_name => 'exceptionq', queue_table =>
'sys.tkaqqtdef', queue_type => DBMS_AQADM.EXCEPTION_QUEUE, comment => 'exception q in tkaqqtdef');
Statement processed.
SVRMGR>
SVRMGR> Rem Create procedure to check the list of subscribers for each queue
SVRMGR>
SVRMGR> CREATE OR REPLACE PROCEDURE TKAQ_SUBSCRIBERS(qname VARCHAR2) AS
     2>
                 dbms_aqadm.aq$_subscriber_list_t;
     3> subs
     4> nsubs
                 BINARY_INTEGER:
     5> i
                 BINARY_INTEGER;
     6>
     7> begin
     8>
           subs := dbms_aqadm.queue_subscribers(qname);
     9>
    10>
    11>
           dbms_output.put_line(qname);
          dbms_output.put_line('----
    12>
    13>
    14>
          nsubs := subs.COUNT;
    15>
          FOR i IN 0...nsubs-1 LOOP
             IF subs(i) IS NOT NULL THEN
  dbms_output.put_line('--> ' || subs(i).name);
    16>
    17>
    18>
             END IF;
    19>
          END LOOP;
    20>
    21> end TKAQ_SUBSCRIBERS;
    22> /
Statement processed.
```

```
SVRMGR>
SVRMGR> CREATE OR REPLACE PROCEDURE TKAQ_HISTORY(engmsgid RAW) AS
     2>
                       sys.aq\_history;
     3> hist
                       BINARY_INTEGER;
     4> nsubs
                       BINARY_INTEGER;
     5> i
     6>
     7> begin
     8>
     9>
         select history into hist
    10>
         from
                tkaqqtdef
    11>
         where msgid = enqmsgid;
    12>
    13>
          dbms_output.put_line('-----
    14>
         IF hist IS NOT NULL THEN
    15>
    16>
           nsubs := hist.COUNT:
           dbms_output.put_line(nsubs);
    17>
           FOR i IN 1...nsubs LOOP
    18>
             IF hist(i) IS NOT NULL THEN
  dbms_output.put_line('APP --> ' || hist(i).consumer);
    19>
    20>
               21>
    22>
    23>
    24>
    25>
                 dbms_output.put_line('TXN --> ');
    26>
               END IF;
             END IF;
    27>
    28>
           END LOOP;
    29>
         END IF;
         dbms_output.put_line('-----
    30>
    31>
    32> end TKAQ_HISTORY;
    33> /
MGR-00072: Warning: PROCEDURE TKAQ_HISTORY created with compilation errors.
SVRMGR>
SVRMGR>
SVRMGR> Rem check subscribers for gueues created
SVRMGR>
SVRMGR> set serveroutput on
Server Output
                               ON
SVRMGR>
SVRMGR> execute tkaq_subscribers('Q1DEF');
Statement processed.
SVRMGR> execute tkaq_subscribers('Q2DEF');
Statement processed.
Q2DEF
SVRMGR> execute tkaq_subscribers('Q1PEQT');
Statement processed.
Q1PEQT
SVRMGR> execute tkaq_subscribers('Q2PEQT');
Statement processed.
Q2PEQT
SVRMGR> execute tkaq_subscribers('Q1PRI');
Statement processed.
Q1PRI
SVRMGR> execute tkaq_subscribers('Q2PRI');
                                      Page 4
```

```
Statement processed.
Q2PRI
SVRMGR>
SVRMGR> Rem add some default subscribers for each queue.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app1_q1def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.qldef',app1_qldef);
     6> end;
     7> /
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_qldef := sys.aq$_agent('app2_qldef', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
     6> end;
     7>
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app3_q1def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
     6> end:
     7> /
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app4_q1def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
     6> end:
     7>
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app5_q1def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q1def',app1_q1def);
     6> end;
     7>
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     4> app1_q1def := sys.aq$_agent('app6_q1def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.qldef',app1_qldef);
     6> end;
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
```

```
3> begin
     4> app1_q1def := sys.aq$_agent('app1_q2def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q2def',app1_q1def);
     7> /
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app2_q2def', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q2def',app1_q1def);
     7> /
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_gldef := sys.ag$_agent('app1_glpeqt', NULL, NULL);
    5> dbms_aqadm.add_subscriber('sys.q1peqt',app1_q1def);
     6> end;
     7> /
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_qldef := sys.aq$_agent('app2_q1peqt', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.qlpeqt',app1_qldef);
     6> end;
     7> /
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     4> app1_q1def := sys.aq$_agent('app1_q2peqt', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q2peqt',app1_q1def);
     6> end;
     7>
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app2_q2peqt', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q2peqt',app1_q1def);
     6> end:
     7>
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app1_q1pri', NULL, NULL);
     5> dbms_agadm.add_subscriber('sys.q1pri',app1_q1def);
     6> end;
     7> /
Statement processed.
```

```
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app2_q1pri', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q1pri',app1_q1def);
     7>
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app1_q2pri', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q2pri',app1_q1def);
     6> end;
     7> /
Statement processed.
SVRMGR>
SVRMGR> declare
     2> app1_q1def sys.aq$_agent;
     3> begin
     4> app1_q1def := sys.aq$_agent('app2_q2pri', NULL, NULL);
     5> dbms_aqadm.add_subscriber('sys.q2pri',app1_q1def);
     6> end;
     7> /
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> Rem check subscribers for queues created
SVRMGR>
SVRMGR> execute tkaq_subscribers('Q1DEF');
Statement processed.
Q1DEF
--> APP1_Q1DEF
--> APP2_Q1DEF
--> APP3_Q1DEF
--> APP4_Q1DEF
--> APP5_Q1DEF
--> APP6_Q1DEF
SVRMGR> execute tkaq_subscribers('Q2DEF');
Statement processed.
Q2DEF
--> APP1_Q2DEF
--> APP2_Q2DEF
SVRMGR> execute tkaq_subscribers('Q1PEQT');
Statement processed.
Q1PEQT
--> APP1_Q1PEQT
--> APP2_Q1PEQT
SVRMGR> execute tkaq_subscribers('Q2PEQT');
Statement processed.
Q2PEQT
--> APP1_Q2PEQT
--> APP2_Q2PEQT
SVRMGR> execute tkaq_subscribers('Q1PRI');
Statement processed.
Q1PRI
```

```
--> APP1_Q1PRI
--> APP2_Q1PRI
SVRMGR> execute tkaq_subscribers('Q2PRI');
Statement processed.
Q2PRI
--> APP1_Q2PRI
--> APP2_Q2PRI
SVRMGR>
SVRMGR>
SVRMGR> Rem start the queues
SVRMGR> execute dbms_aqadm.start_queue(queue_name => 'sys.q1def');
Statement processed.
SVRMGR> execute dbms_aqadm.start_queue(queue_name => 'sys.q2def');
Statement processed.
SVRMGR> execute dbms_aqadm.start_queue(queue_name => 'sys.q1peqt');
Statement processed.
SVRMGR> execute dbms_aqadm.start_queue(queue_name => 'sys.q2peqt');
Statement processed.
SVRMGR> execute dbms_aqadm.start_queue(queue_name => 'sys.q1pri');
Statement processed.
SVRMGR> execute dbms_aqadm.start_queue(queue_name => 'sys.q2pri');
Statement processed.
SVRMGR>
```

```
Echo
SVRMGR> connect tkaguser/tkaguser
Connected.
SVRMGR> set serveroutput on
Server Output
                                 ON
SVRMGR>
SVRMGR> create or replace procedure tkaq_navenq(priority in number) as
     2> enq_userdata sys.message;
     3> enq_msgid
                      raw(16);
                      dbms_aq.enqueue_options_t;
     4> enqopt
     5> msgprop
                      dbms_aq.message_properties_t;
     6>
     7> begin
     8>
     9> enq_userdata := sys.message(priority, 'HELLO, WORLD!');
    10> msgprop.priority := priority;
    11> dbms_aq.enqueue('sys.q2pri', enqopt, msgprop, enq_userdata, enq_msgid);
    12> end;
    13> /
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(1);
Statement processed.
SVRMGR> execute tkaq_navenq(2);
Statement processed.
SVRMGR> commit;
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(3);
Statement processed.
SVRMGR> execute tkaq_navenq(4);
Statement processed.
SVRMGR> commit:
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(5);
Statement processed.
SVRMGR> execute tkaq_navenq(6);
Statement processed.
SVRMGR> commit;
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(7);
Statement processed.
SVRMGR> execute tkaq_navenq(8);
Statement processed.
SVRMGR> commit;
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(9);
Statement processed.
SVRMGR> execute tkaq_navenq(10);
Statement processed.
SVRMGR> commit;
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(11);
Statement processed.
SVRMGR> execute tkaq_navenq(12);
Statement processed.
SVRMGR> commit;
Statement processed.
```

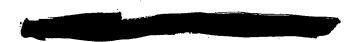
SVRMGR>

```
SVRMGR> execute tkaq_navenq(15),
Statement processed:
SVRMGR> execute tkaq_navenq(14);
Statement processed.
SVRMGR> commit;
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navenq(15);
Statement processed.
SVRMGR> execute tkaq_navenq(16);
Statement processed.
SVRMGR> commit;
Statement processed.
SVRMGR>
SVRMGR> create or replace procedure tkaq_navdeq(consumer IN VARCHAR2) as
       2> deq_userdata sys.message;
                           raw(16);
       3> deq_msgid
       4> degopt
                           dbms_aq.dequeue_options_t;
       5> msqprop
                           dbms_aq.message_properties_t;
       6>
       7> begin
       8>
          degopt.wait := DBMS_AQ.NO_WAIT;
       9>
     10> deqopt.consumer_name := consumer;
     11> deqopt.navigation := DBMS_AQ.FIRST_MESSAGE;
     12>
          deqopt.dequeue_mode := DBMS_AQ.BROWSE;
     13>
     14>
             FOR i in 1..9 loop
               dbms_aq.dequeue('sys.q2pri', deqopt, msgprop, deq_userdata, deq_msgid);
dbms_output.put_line('Message: ' || deq_userdata.id
     15>
     16>
     17>
                                                                 || deq_userdata.data);
     18>
     19>
               deqopt.navigation := DBMS_AQ.NEXT_MESSAGE;
     20>
             END LOOP:
     21>
     22> end;
     23> /
Statement processed:
SVRMGR>
SVRMGR> execute tkag_navdeg('app1_q2pri');
Statement processed.
Message: 1:HELLO, WORLD!
Message: 2:HELLO, WORLD!
Message: 3:HELLO, WORLD!
Message: 4:HELLO, WORLD!
Message: 5:HELLO, WORLD!
Message: 6:HELLO, WORLD!
Message: 7:HELLO, WORLD!
Message: 8:HELLO, WORLD!
Message: 9:HELLO, WORLD!
SVRMGR> execute tkaq_navdeq('app2_q2pri');
Statement processed.
Message: 1:HELLO, WORLD!
Message: 1:HELLO, WORLD:
Message: 2:HELLO, WORLD!
Message: 3:HELLO, WORLD!
Message: 4:HELLO, WORLD!
Message: 5:HELLO, WORLD!
Message: 7:HELLO, WORLD!
Message: 7:HELLO, WORLD!
Message: 8:HELLO, WORLD!
Message: 9:HELLO, WORLD!
SVRMGR> create or replace procedure tkaq_navdeq(consumer IN VARCHAR2) as
```

```
2> deq_userdata sys.message;
       3> deq_msgid
                           raw(16);
       4> deqopt
                           dbms_aq.dequeue_options_t;
       5> msgprop
                           dbms_aq.message_properties_t;
       6>
       7>
          begin
       8>
       9> degopt.wait := DBMS_AQ.NO_WAIT;
     10> degopt.consumer_name := consumer;
     11> degopt.navigation := DBMS_AQ.FIRST_MESSAGE;
     12>
     13>
             FOR i in 1..19 loop
               dbms_aq.dequeue('sys.q2pri', deqopt, msgprop, deq_userdata, deq_msgid);
dbms_output.put_line('Message: ' || deq_userdata.id
     14>
     15>
     16>
                                                                 | deq_userdata.data);
     17>
     18>
               deqopt.navigation := DBMS_AQ.NEXT_MESSAGE;
     19>
             END LOOP;
     20>
     21> end:
     22> /
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_navdeq('app1_q2pri');
ORA-25228: timeout in dequeue from SYS.Q2PRI while waiting for a message
ORA-06512: at "SYS.DBMS_AQ", line .*
ORA-06512: at "TKAQUSER.TKAQ_NAVDEQ", line .*
ORA-06512: at line .*
Message: 1:HELLO, WORLD!
Message: 2:HELLO, WORLD!
Message: 3:HELLO, WORLD!
Message: 4:HELLO, WORLD!
Message: 5:HELLO, WORLD!
Message: 6:HELLO, WORLD!
Message: 7:HELLO, WORLD!
Message: 8:HELLO, WORLD!
Message: 9:HELLO, WORLD!
Message: 10:HELLO, WORLD!
Message: 11:HELLO, WORLD!
Message: 12:HELLO, WORLD!
Message: 13:HELLO, WORLD!
Message: 14:HELLO, WORLD!
Message: 15:HELLO, WORLD!
Message: 16:HELLO, WORLD!
SVRMGR> execute tkaq_navdeq('app2_q2pri');
ORA-25228: timeout in dequeue from SYS.Q2PRI while waiting for a message
ORA-23228: Climedat III dequade III in 373.Q2FRI (ORA-06512: at "SYS.DBMS_AQ", line .* ORA-06512: at "TKAQUSER.TKAQ_NAVDEQ", line .* ORA-06512: at line .* Message: 1:HELLO, WORLD!
Message: 2:HELLO, WORLD!
Message: 3:HELLO, WORLD!
Message: 4:HELLO, WORLD!
Message: 5:HELLO, WORLD!
Message: 6:HELLO, WORLD!
Message: 7:HELLO, WORLD!
Message: 8:HELLO, WORLD!
Message: 9:HELLO, WORLD!
Message: 10:HELLÓ, WORLD!
Message: 11:HELLO, WORLD!
Message: 12:HELLO, WORLD!
Message: 13:HELLO, WORLD!
Message: 14:HELLO, WORLD!
```

Message: 15:HELLO, WORLD! Message: 16:HELLO, WORLD! SVRMGR>

```
Echo
SVRMGR> connect sys/knl_test7 as sysdba
Connected.
SVRMGR> set serveroutput on
                                 ON
Server Output
SVRMGR>
SVRMGR>
SVRMGR>
SVRMGR>
SVRMGR> CREATE OR REPLACE PROCEDURE TKAQ_MBASICENQ(id IN NUMBER, text IN VARCHAR2)
                        dbms_aq.message_properties_t;
     2> msgprop
                        dbms_aq.enqueue_options_t;
     3> enqopt
                        raw(16);
     4> enq_msgid
     5> enq_userdata
                        message;
     6>
     7> begin
     8>
     9> enq_userdata := message(id, text);
    10> dbms_aq.enqueue(
                queue_name => 'sys.q2def',
    11>
    12>
                enqueue_options => enqopt,
                message_properties => msgprop,
    13>
                payload => enq_userdata,
    14>
                msgid => enq_msgid);
    15>
    16>
    17> end;
    18> /
Statement processed.
SVRMGR>
SVRMGR> CREATE OR REPLACE PROCEDURE TKAQ_MBASICDEQ(subscriber
                                                                   IN VARCHAR2) AS
     2>
                              dbms_aq.dequeue_options_t;
     3>
          dequeue_options
          message_properties dbms_aq.message_properties_t;
     4>
          deq_userdata
                              sys.message:
     5>
     6>
          dea_msqid
                              raw(16);
     7>
        begin
          dequeue_options.consumer_name := subscriber;
     8>
          dequeue_options.navigation := DBMS_AQ.FIRST_MESSAGE;
     9>
    10>
          dequeue_options.wait := 1;
          dbms_aq.dequeue(queue_name=> 'sys.q2def',
    11>
                           dequeue_options=>dequeue_options,
    12>
                           message_properties=>message_properties,
    13>
    14>
                           payload=>deq_userdata,
    15>
                           msqid=>deq_msgid);
    16>
          commit;
    17>
    18> dbms_output.put_line('MESG-> ' || deq_userdata.id || ' ' ||
deq_userdata.data):
    19>
    20> end;
    21>
Statement processed.
SVRMGR>
SVRMGR> Rem enqueue twelve messages each subscriber should get two.
SVRMGR> execute tkaq_mbasicenq(1, 'First Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(2, 'second Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(3, 'Third Message');
                                         Page 1
```



```
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(4, 'Fourth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasiceng(5, 'Fifth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(6, 'Sixth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkag_mbasiceng(7, 'Seventh Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(8, 'Eight Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(9, 'Ninth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(10, 'Tenth Message'):
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(11, 'Eleventh Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(12, 'Twelveth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(13, 'Thirteenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasiceng(14, 'Fourteenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(15, 'Fifteenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(16, 'Sixteenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(17, 'Seventeenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(18, 'Eighteenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(19, 'Nineteenth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasiceng(20, 'Twentyth Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(21, 'Twentyfirst Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(22, 'Twenty2nd Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkag_mbasiceng(23, 'Twenty3rd Message');
Statement processed.
SVRMGR>
SVRMGR> execute tkaq_mbasicenq(24, 'Twenty4th Message'):
                                        Page 2
```

Statement processed. SVRMGR> commit; Statement processed. SVRMGR>

```
SVRMGR> connect sys/knl_test7 as sysdba
Connected.
SVRMGR> set serveroutput on
Server Output
                                 ON
SVRMGR>
SVRMGR> Rem now do dequeues
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 1 First Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 1 First Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 2 Second Message
.SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 2 Second Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 3 Third Message
SVRMGR> execute tkag_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 3 Third Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 4 Fourth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 4 Fourth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 5 Fifth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 5 Fifth Message
SVRMGR> execute tkaq_mbasicdeg('app1_q2def');
Statement processed.
MESG-> 6 Sixth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 6 Sixth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 7 Seventh Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 7 Seventh Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 8 Eight Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 8 Eight Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 9 Ninth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 9 Ninth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
                                        Page 1
```

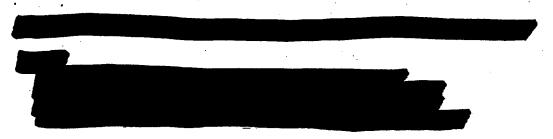
```
MESG-> 10 Tenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 10 Tenth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 11 Eleventh Message
SVRMGR> execute tkag_mbasicdeg('app2_g2def');
Statement processed.
MESG-> 11 Eleventh Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 12 Twelveth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 12 Twelveth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 13 Thirteenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 13 Thirteenth Message
SVRMGR> commit:
Statement processed.
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 14 Fourteenth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 15 Fifteenth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 16 Sixteenth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 17 Seventeenth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 18 Eighteenth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 19 Nineteenth Message
SVRMGR> execute tkaq_mbasicdeg('app1_q2def');
Statement processed.
MESG-> 20 Twentyth Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 21 Twentyfirst Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 22 Twenty2nd Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.
MESG-> 23 Twenty3rd Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
Statement processed.

MESG-> 24 Twenty4th Message
SVRMGR> execute tkaq_mbasicdeq('app1_q2def');
ORA-25228: timeout in dequeue from SYS.Q2DEF while waiting for a message
ORA-06512: at "SYS.DBMS_AQ", line .*
ORA-06512: at "SYS.TKAQ_MBASICDEQ", line .*
ORA-06512: at line .*
SVRMGR> commit;
```

```
Statement processed.
 SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 14 Fourteenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 15 Fifteenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 16 Sixteenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 17 Seventeenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 18 Eighteenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 19 Nineteenth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 20 Twentyth Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 21 Twentyfirst Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 22 Twenty2nd Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def'); Statement processed.
MESG-> 23 Twenty3rd Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
Statement processed.
MESG-> 24 Twenty4th Message
SVRMGR> execute tkaq_mbasicdeq('app2_q2def');
ORA-25228: timeout in dequeue from SYS.Q2DEF while waiting for a message
ORA-06512: at "SYS.DBMS_AQ", line .*
ORA-06512: at "SYS.TKAQ_MBASICDEQ", line .*
ORA-06512: at line .*
SVRMGR> commit;
Statement processed.
```

```
Echo
SVRMGR>
SVRMGR> connect sys/knl_test7 as sysdba
Connected.
SVRMGR>
SVRMGR> Rem cleanup the queue tables
SVRMGR>
SVRMGR> execute dbms_aqadm.drop_queue_table('sys.tkaqqtdef', TRUE);
Statement processed.
SVRMGR> execute dbms_aqadm.drop_queue_table('sys.tkaqqtpeqt', TRUE);
Statement processed.
SVRMGR> execute dbms_aqadm.drop_queue_table('sys.tkaqqtpri', TRUE);
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> Rem connect as sys and drop the types
SVRMGR> connect sys/knl_test7 as sysdba
Connected.
SVRMGR>
SVRMGR> drop type message;
Statement processed.
SVRMGR>
SVRMGR>
SVRMGR> Rem disable aq logins
SVRMGR>
SVRMGR> drop user tkaquser cascade;
Statement processed.
SVRMGR> drop user tkagadmn cascade;
Statement processed.
SVRMGR>
SVRMGR>
```

```
execute tkaq_mbasicdeq('app1_q2def');
commit;
execute tkaq_mbasicdeq('app1_q2def');
execute tkaq_mbasicdeq('app2_q2def');
```



Short regress has 0 dif - run with use_ism=false.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	regress ma	D 0 011 1011 .	abo		
tk0i	rddl.suc	tkaqrawt.suc	tkoolqyi.suc	tkprddls.suc	tkqrords.suc
tk0i	riot.suc	tkb2srg.suc	tkoommo2.suc	tkprdemo.suc	tkqrsecb.suc
tk0i	rmts.suc	tkdrpls1.suc	tkoqbrqr.suc	tkprdep1.suc	tkqrsels.suc
tkaq	bdq2.suc	tkgrsecs.suc	tkp83c1.suc	tkprdep2.suc	tkqrtres.suc
tkaq	beq1.suc	tkhodbck.suc	tkpasr81.suc	tkprdep3.suc	tkqrwhes.suc
tkaq	beq2.suc	tkhomrg.suc	tkpasrg0.suc	tkprdep4.suc	tkqxeisr.suc
tkaq	dqb1.suc	tkhoucmr.suc	tkpbdl.suc	tkprdep5.suc	tkrcrash.suc
tkaq	dqb2.suc	tkigfsrt.suc	tkpmsrl.suc	tkprdep6.suc	tkrcrsha.suc
tkaq	dqba.suc	tkirenbs.suc	tkpmsrnl.suc	tkprexec.suc	tkrmlite.suc
tkaq	dqrc.suc	tkirinds.suc	tkpopro.suc	tkprmisc.suc	tkrmliti.suc
tkaq	mbdq.suc	tkoodcat.suc	tkpotta.suc	tkprsqlp.suc	tksrsubs.suc
tkaq	mbei.suc	tkoodcta.suc	tkpqcafs.suc	tkprtime.suc	tktrclus.suc
tkaq	mnav.suc	tkoodctn.suc	tkpqdups.suc	tkprtimm.suc	tktrmnps.suc
tkaq	nsb1.suc	tkoodtc1.suc	tkpqgrps.suc	tkpuori.suc	tktrnaos.suc
tkaq	nsb2.suc	tkoodtci.suc	tkpqjois.suc	tkqrcats.suc	tktrtabs.suc
tkaq	nsb3.suc	tkoodtcm.suc	tkpqmain.suc	tkqrdats.suc	tktrvies.suc
tkaq	nsb4.suc	tkoodtir.suc	tkpqords.suc	tkqrexps.suc	tkxabrch.suc
tkaq	nsb5.suc	tkoodxu0.suc	tkpqrgrs.suc	tkqrgrps.suc	tkzrlso0.suc
tkaq	oci2.suc	tkoolqyc.suc	tkpqwhrs.suc	tkqrjois.suc	
tkaq	rawi.suc	tkoolqyd.suc	tkprbugs.suc	tkqrnuls.suc	

Long regress will not be started as we need machines for other tests.

Transaction: ntang_bug-733938

Transaction: ykunitom_bug-704908_1

kpodp.c@@/main/3
Bug 704908
kdbl.c@@/main/115
d: bug 704908
kdbl.h@@/main/26
kla.c@@/main/3
Bug 704908
klc.c@@/main/102
klcli.c@@/main/16

opiul.c@@/main/35

Transaction: pong bug-713950_1

```
ksdx0.h@@/main/4
 ksdx.c00/main/22
Transaction: weiwang bug-718209
 kkdl.c@@/main/378
           Merge From /vobs/rdbms/src/server/dict/dictlkup/kkdl.c@@/main/377.
 kkfi.c@@/main/18
           Merge From /vobs/rdbms/src/server/optim/cbo/kkfi.c@@/main/17
 kda.c@@/main/117
 kau.c@@/main/97
 gerlt.c00/main/41
 qkadrv.c@@/main/224
           Merge From /vobs/rdbms/src/server/sqlexec/rwsalloc/qkadrv.c@@/main/223
 klcbs.h@@/main/47

    Check for disabled flag

 klc.c@@/main/101
Transaction: ato_make_user_queue_table_views
 catqueue.sql@@/main/34
           create all queue tables views
 Makefile@@/main/9
           add prvtagin.sql
 prvtaqin.sql@@/main/3
           add java interface
Transaction: smuralid_bug-718348
 ttccap.c@@/main/4
            ttccapSnd: don't send if null caps
 koka.c@@/main/38
           Merge From /vobs/rdbms/src/server/objsupp/objdata/koka.c@@/main/37
 kpo.h@@/main/21
           make kpoRTcaps an SGA variable
 opidrv.c@@/main/81
           opidry, opiscb: set hstmrtcap to null if SGA's not initialized
 opiino.c@@/main/35
            opiino: set hstmrtcap to kpoRTcaps after mapping in SGA
 opirip.c@@/main/30
           Merge From /vobs/rdbms/src/server/progint/opi/opirip.c@@/main/29
 opitsk.c@@/main/67
           Merge From /vobs/rdbms/src/server/progint/opi/opitsk.c@@/main/66
Transaction: rshaikh_fix_downgrade
 c0801030.sql@@/main/10
          drop type rowset
```

d0800050.sql@@/main/34



Transaction: najain_658136-1

uacdef.h@@/main/20

remove UACFNLMX

kxs.cee/main/151

remove UACFNLBV

kks.c@@/main/316

remove UACFNLBV

opix.c@@/main/82

remove UACFNLBV

Transaction: thchang_templob_rdwr

kokl.c@@/main/64

Merge From /vobs/rdbms/src/server/objsupp/objdata/kokl.c00/main/63

KOK<u>13.ce</u>@/main/21 . templob

Transaction: ramkrish_bug-685852_2

opitsk.c@@/main/68

opitsk: bug 685852 - BFILE check

Transaction: lkaplan_row_cln_err

AllA.java@@/main/9

RefGrp.java@@/main/5

RepAPI.java@@/main/9

Transaction: sichandr bug-729312

kkt.c@@/main/108

. #729312 : fix error message for DATABASE triggers

Transaction: awitkows_bug-732881

vop.c@@/main/135

complex view & correlated var

Transaction: najain_bug-730182

kql.c00/main/240

fix 730182

Transaction: heneman_lrg27341

kmc.c@@/main/100 LRG 27341: correct order of interruptable test Transaction: ntang bug-737564 k2g.c@@/main/52 Out of Transaction changes: depprod@@/main/solaris/227 update plsql, precomp, sqlplus, ordts, ldap raberrog@@/main/264 new log .manifest@@/main/solaris/271 new label mesg@@/main/5 Add new qsmXX.msg translations for 8.1.4 Added file element "qsmd.msg". Added file element "qsmf.msg". Added file element "qsmja.msg". qsmd.msg@@/main/0 qsmf.msg@@/main/0 qsmja.msg@@/main/0 joint@@/main/6 Add 8.1.4 RepAPIError.properties translation entries Added file element "RepAPIErrorD.properties". Added file element "RepAPIErrorF.properties". Added file element "RepAPIErrorJA.properties". RepAPIErrorD.properties@@/main/0 RepAPIErrorF.properties@@/main/0 RepAPIErrorJA.properties@@/main/0

```
Short regress has 0 dif - run with use ism=false.
  tk0irddl.suc
                 tkaqrawt.suc
                                tkoolqyi.suc
                                               tkprddls.suc
                                                              tkqrords.suc
  tk0iriot.suc
                 tkb2srg.suc
                                tkoommo2.suc
                                               tkprdemo.suc
                                                              tkqrsecb.suc
  tk0irmts.suc
                 tkdrpls1.suc
                                tkoqbrqr.suc
                                               tkprdep1.suc
                                                              tkqrsels.suc
  tkaqbdq2.suc
                 tkgrsecs.suc
                                tkp83c1.suc
                                               tkprdep2.suc
                                                              tkqrtres.suc
                 tkhodbck.suc
                                tkpasr81.suc
                                               tkprdep3.suc
  tkaqbeq1.suc
                                                              tkqrwhes.suc
                                tkpasrg0.suc
  tkaqbeq2.suc
                 tkhomrg.suc
                                               tkprdep4.suc
                                                              tkqxeisr.suc
                 tkhoucmr.suc
                                tkpbdl.suc
                                               tkprdep5.suc
  tkaqdqb1.suc
                                                              tkrcrash.suc
  tkaqdqb2.suc
                 tkigfsrt.suc
                                tkpmsrl.suc
                                               tkprdep6.suc
                                                              tkrcrsha.suc
  tkaqdqba.suc
                 tkirenbs.suc
                                tkpmsrnl.suc
                                               tkprexec.suc
                                                              tkrmlite.suc
  tkaqdqrc.suc
                 tkirinds.suc
                                tkpopro.suc
                                               tkprmisc.suc
                                                              tkrmliti.suc
  tkaqmbdq.suc
                 tkoodcat.suc
                                tkpotta.suc
                                               tkprsqlp.suc
                                                              tksrsubs.suc
  tkaqmbei.suc
                 tkoodcta.suc
                                tkpqcafs.suc
                                               tkprtime.suc
                                                              tktrclus.suc
  tkaqmnav.suc
                 tkoodctn.suc
                                tkpqdups.suc
                                               tkprtimm.suc
                                                              tktrmnps.suc
                                tkpqqrps.suc
                                               tkpuori.suc
  tkaqnsb1.suc
                 tkoodtc1.suc
                                                              tktrnaos.suc
  tkaqnsb2.suc
                 tkoodtci.suc
                                tkpqjois.suc
                                               tkqrcats.suc
                                                              tktrtabs.suc
 .tkaqnsb3.suc
                 tkoodtcm.suc
                                tkpqmain.suc
                                               tkqrdats.suc
                                                              tktrvies.suc
  tkaqnsb4.suc
                 tkoodtir.suc
                                tkpqords.suc
                                               tkqrexps.suc
                                                              tkxabrch.suc
                 tkoodxu0.suc
  tkaqnsb5.suc
                                tkpqrgrs.suc
                                               tkqrgrps.suc
                                                              tkzrlso0.suc
  tkaqoci2.suc
                 tkoolqyc.suc
                                tkpqwhrs.suc
                                               tkqrjois.suc
                 tkoolqyd.suc
  tkaqrawi.suc
                                tkprbugs.suc
                                               tkqrnuls.suc
Long regress has been started.
Transaction: rjenkins bug-702786
 kkdc.c@@/main/85
           Merge From /vobs/rdbms/src/server/dict/dictlkup/kkdc.c@@/main/84
 kkpoc.c@@/main/17
           more stuff
 kkpam.h@@/main/13
        702786: make kkpamKRange return fragment numbers
 kdic.c@@/main/131
          Merge From /vobs/rdbms/src/server/ram/index/kdic.c@@/main/130
 kkpam.c@@/main/19
           ▶ 702786: merge changes from andre
 kkpam0.h@@/main/8
          702786: merging in andre's changes
 delexe.c@@/main/163
        try again
 kxcc.h@@/main/15
           Merge From /vobs/rdbms/src/server/sqllang/if/kxcc.h@@/main/14
 kxcc.c@@/main/23
           Merge From /vobs/rdbms/src/server/sqllang/integ/kxcc.c@@/main/22
 xty.c@@/main/189
         Merge From /vobs/rdbms/src/server/sqllang/typeconv/xty.c@@/main/188
Transaction: thoang partobj bugs
atb.c@@/main/250
```

koke.h@@/main/28

Add fragno argument to kokeicd2m()

kkbl.c@@/main/38

kkblclsi: setup lsinfo for varray stored as lob
koke.c@@/main/45

Pass fragno to kokeicd2m()
kaf.c@@/main/78

Pass fragno to kokeicd2m()
updexe.c@@/main/231

Pass fragno to kokeicd2m

Out of Transaction changes:
.labellog@@/main/261

new log
.manifest@@/main/solaris/268

new label
.labellog@@/main/260

Correcting root directory entries for 980925 label.

÷



This label was compiled with -xprofile=use option.

Short regress has 0 dif - run with use ism=false.

tk0irddl.suc tkagrawt.suc tkoolqyi.suc tkprddls.suc tkqrords.suc tkoommo2.suc tkqrsecb.suc tk0iriot.suc tkb2srg.suc tkprdemo.suc tkdrpls1.suc tkogbrqr.suc tkprdep1.suc tkqrsels.suc tk0irmts.suc tkp83c1.suc tkprdep2.suc tkqrtres.suc tkaqbdq2.suc tkgrsecs.suc tkpasr81.suc tkprdep3.suc tkgrwhes.suc tkaqbeq1.suc tkhodbck.suc tkpasrg0.suc tkprdep4.suc tkqxeisr.suc tkaqbeq2.suc tkhomrg.suc tkpbdl.suc tkprdep5.suc tkrcrash.suc tkaqdqb1.suc tkhoucmr.suc tkaqdqb2.suc tkigfsrt.suc tkpmsrl.suc tkprdep6.suc tkrcrsha.suc tkirenbs.suc tkpmsrnl.suc tkprexec.suc tkrmlite.suc tkaqdqba.suc tkrmliti.suc tkirinds.suc tkpopro.suc tkprmisc.suc tkaqdqrc.suc tkaqmbdq.suc tkoodcat.suc tkpotta.suc tkprsqlp.suc tksrsubs.suc tktrclus.suc tkaqmbei.suc tkoodcta.suc tkpqcafs.suc tkprtime.suc tktrmnps.suc tkoodctn.suc tkpqdups.suc tkprtimm.suc tkaqmnav.suc tkpuori.suc tktrnaos.suc tkaqnsb1.suc tkoodtc1.suc tkpqgrps.suc tkaqnsb2.suc tkoodtci.suc tkpqjois.suc tkqrcats.suc tktrtabs.suc tkaqnsb3.suc tkoodtcm.suc tkpqmain.suc tkqrdats.suc tktrvies.suc tkoodtir.suc tkpqords.suc tkqrexps.suc tkxabrch.suc tkaqnsb4.suc tkqrgrps.suc tkxafini.suc tkaqnsb5.suc tkoodxu0.suc tkpqrgrs.suc tkoolqyc.suc tkpqwhrs.suc tkarjois.suc tkxainit.suc tkaqoci2.suc tkoolqyd.suc tkprbugs.suc tkgrnuls.suc tkzrlso0.suc tkaqrawi.suc

Long regress will be started tomorrow evening.

Transaction: ramkrish bugfix-varray

kkbl.c@@/main/30

kkblclsi: fix varray bug introduced as part of atbmov

Transaction: snutakki bug-511898 5

gerix.c@@/main/128

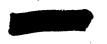
Fix regression from merge of 511898

Transaction: syeung_bug-702172_1

kda.c@@/main/113

Transaction: mkrishna fix_objview_bugs

```
kxti.h@@/main/5
          add KXTDF NTT TRIGGER
 kxti.c@@/main/14
 kxto.c@@/main/22
       : fix bug 704081
 kkdo.h@@/main/20
          make lint happy
 kokv.c@@/main/20
         fix core dumps when invalid type is given
 nsoqbc.c@@/main/53
         nsomrg: set up froljc for dependent tables
 xty.c@@/main/180
 cvw.c@@/main/105
         fix cvwosfor
 delexe.c00/main/155
     change kxtifrw calling
Transaction: amozes_lrg-25369
 dbsdrv.c@@/main/162
         check if database is open before calling ksxshut
Transaction: sdas bug-703264
 kau.c@@/main/90
         partitioned iot: fix bug 703264
 kdu.c@@/main/115
       kdudcp(): replace kduuskflag with kduusdflag
 kau.h@@/main/36
     name/interface chg: kauboikey->kauibokey, kaubnikey->kauibnkey
 delexe.c@@/main/156
  iot: set kduikauc in delini()
 updexe.c00/main/221
         iot: remove kdkreb call, kauibokey did its job
 gerfu.c@@/main/23
         iot: set kduikauc in qerfuInitFrame()
Transaction: bnnguyen_bug-678044
 psdicd.c@@/main/174
         bug678044
Transaction: svedala create part demo
demo@@/main/19
         Added file element "cdemoplb.c".
           Added file element "cdemoplb.sql".
           Added file element "cdemoplb.h".
           Added file element "cdemoplb.dat".
           Removed file element "cdemoplb.h".
           Removed file element "cdemoplb.sql".
           Removed file element "cdemoplb.dat"..
cdemoplb.c@@/main/1
```



Transaction: amganesh_ktprundo-noret

ktpr.c@@/main/13

: ktprundo doesnt return

Transaction: thoang_merge_696471

kgl.h@@/main/205

: Removed kglcldp

kg12.c00/main/109

: Removed kglcldp

kkm.c@@/main/380

kkpod.c@@/main/27

atb.c@@/main/228

cvw.c@@/main/106

dix.c@@/main/52

qkadrv.c@@/main/209

Transaction: nmacnaug_merge_9

kcbz.h@@/main/46

: do not use kcbbhba field directly

kcl.c@@/main/113

: rename structure element to avoid conflict

kcl0.h@@/main/25

: rename structure element to avoid conflict

Transaction: st_plsql_smkrishn_no_rebind

kkxwtp.c00/main/192

Merge From /vobs/rdbms/src/server/progint/opi/kkxwtp.c@@/main/188

Transaction: nmacnaug_fix_24

kcl.h@@/main/53

B: add exclusive hint

kcbz.c@@/main/119

: use exclusive hint

kcl2.h@@/main/34

: send class correctly to bsp

kcl.c@@/main/111

: send class correctly to bsp

Transaction: lkaplan_change_drop

FDSAccess.java@@/main/5

FDSObject.java@@/main/5

Transaction: nmacnaug_lrg-25129

kcl2.h00/main/35

: remove queued upconvert

kcl.c@@/main/112

: remove queued upconvert

kcl0.h@@/main/24

remove queued upconvert

Transaction: jklein_bug-708701

kdd.c@@/main/83

bug 708701 - maintain col_list between kdudnk calls.

Transaction: st_plsql_smkrishn_backout_rdbms

kkxwtp.c@@/main/194

: Temporarily back out no rebind

Transaction: mcusson_logmnr_nfy

krv.h@@/main/11

Fix short regress problem caused by krvnfy()

krvr.c@@/main/6

: Fix short regress problem caused by krvnfy()

Out of Transaction changes:

.depprod@@/main/solaris/184

update nlsrtl, network, spatial, slax, oracore, /vobs/oracle & precomp

.labellog@@/main/212

new log

.manifest@@/main/solaris/219

: new label

dbfmig.c@@/main/osds/unix/solaris/1

kkxwtp.c00/main/193

Back out psdscp, psdrcp until pfrrun.c is changed

```
Short regress has 0 dif - run with use ism=false.
                                                tkprddls.suc
  tk0irddl.suc
                 tkaqrawt.suc
                                tkoolqyi.suc
                                                               tkgrords.suc
                                tkoommo2.suc
                                                tkprdemo.suc
                                                               tkqrsecb.suc
  tk0iriot.suc
                 tkb2srg.suc
                                tkoqbrqr.suc
                                                tkprdep1.suc
                                                               tkqrsels.suc
  tk0irmts.suc
                 tkdrpls1.suc
                 tkgrsecs.suc
                                                tkprdep2.suc
                                tkp83c1.suc
                                                               tkqrtres.suc
  tkaqbdq2.suc
                 tkhodbck.suc
                                tkpasr81.suc
                                                tkprdep3.suc
                                                               tkqrwhes.suc
  tkaqbeq1.suc
                                tkpasrg0.suc
                                                tkprdep4.suc
                                                               tkqxeisr.suc
  tkaqbeq2.suc
                 tkhomrg.suc
                                                               tkrcrash.suc
                                tkpbdl.suc
                                                tkprdep5.suc
  tkaqdqb1.suc
                 tkhoucmr.suc
  tkaqdqb2.suc
                 tkigfsrt.suc
                                tkpmsrl.suc
                                                tkprdep6.suc
                                                               tkrcrsha.suc
                 tkirenbs.suc
                                tkpmsrnl.suc
                                                tkprexec.suc
                                                               tkrmlite.suc
  tkaqdqba.suc
                                                               tkrmliti.suc
                 tkirinds.suc
                                tkpopro.suc
                                                tkprmisc.suc
  tkaqdqrc.suc
  tkaqmbdq.suc
                 tkoodcat.suc
                                tkpotta.suc
                                                tkprsqlp.suc
                                                               tksrsubs.suc
  tkaqmbei.suc
                 tkoodcta.suc
                                tkpqcafs.suc
                                                tkprtime.suc
                                                               tktrclus.suc
                                                tkprtimm.suc
                                                               tktrmnps.suc
  tkaqmnav.suc
                 tkoodctn.suc
                                tkpqdups.suc
  tkaqnsb1.suc
                 tkoodtcl.suc
                                tkpqgrps.suc
                                                tkpuori.suc
                                                               tktrnaos.suc
                                                tkqrcats.suc
  tkaqnsb2.suc
                 tkoodtci.suc
                                tkpqjois.suc
                                                               tktrtabs.suc
  tkaqnsb3.suc .
                 tkoodtcm.suc
                                tkpqmain.suc
                                                tkqrdats.suc
                                                               tktrvies.suc
                                                               tkxabrch.suc
  tkaqnsb4.suc
                 tkoodtir.suc
                                tkpqords.suc
                                                tkqrexps.suc
                 tkoodxu0.suc
                                tkpqrgrs.suc
                                                tkqrgrps.suc
                                                               tkxafini.suc
  tkaqnsb5.suc
                 tkoolqyc.suc
                                tkpqwhrs.suc
                                                tkqrjois.suc
                                                               tkxainit.suc
  tkaqoci2.suc
                                                tkqrnuls.suc
                                                               tkzrlso0.suc
  tkaqrawi.suc
                 tkoolqyd.suc
                                tkprbugs.suc
Long regress will not be started.
Transaction: smuralid bugs2
 kokq.c@@/main/14
```

: kokqtpo, kokqbpo: propagate OPNOREF

koks.c@@/main/52

: koksrcqb: follow qbcnxt only if NOT(is first)

Transaction: liwong_add_error_23473

e19400.msg@@/main/60 : Add 23473

Transaction: dmwong approlemsg

e24280.msg@@/main/72

: add application role err msg

Transaction: bdagevil_ppwj_no_hj_buffout

qerhj.h@@/main/20

: change flag BUFFER QKNJO to NO_BUFFER_QKNJO

qkna.h@@/main/14

change flag BUFFER QKNJO to NO BUFFER_QKNJO

qerhj.c00/main/46

: buffer output if BUFFER QKNJO is set

qkadrv.c@@/main/205

: qkadrv2(): add phase to set HJ output buff requirement

qkajoi.c@@/main/133

: remove every reference to qkanbf()

Transaction: masubram masubram null ref1 1

c0800050.sql@@/main/3

d0800050.sql@@/main/30

sql.bsq00/main/202

kkdl.c@@/main/360

Merge From /vobs/rdbms/src/server/dict/dictlkup/kkdl.c@@/main/356

kkz.h@@/main/46

kkzd.h@@/main/12

kkzf.h@@/main/12

kkzi.h@@/main/5

kkzu.h@@/main/10

kkzv.h@@/main/5

kkzd.c@@/main/19

kkzf.c@@/main/26

kkzi.c@@/main/12

kkzu.c@@/main/12

kkzv.c@@/main/15

prvtsnap.sql@@/main/27

knt.c@@/main/13

Merge From /vobs/rdbms/src/server/repl/trigger/knt.c00/main/12

qsmqut1.c00/main/5

kkz.c@@/main/126

Transaction: bgoyal bug-692581

e29250.msg@@/main/92

add 30555

Transaction: qyu_bug-428835

catalog.sql@@/main/302

Transaction: vkarra_tpcd_changes

kdi.h@@/main/73

Merge From /vobs/rdbms/src/server/ram/if/kdi.h@@/main/72 kdis.h@@/main/17 : add variables for leaf and branch splits kdi.c@@/main/168 kdis.c@@/main/52 Merge From /vobs/rdbms/src/server/ram/index/kdis.c@@/main/51 Transaction: akruglik_bug-696737 e12700.msg@@/main/53 : add message 14176 kkbl.c@@/main/29 \overline{s} : fix for bug 696737: if performing PITR, allow STORAGE clause when parsing def prsc.c@@/main/387 fix for bug 696737: do not restrict attributes which may be specified for a H Transaction: sichandr optimize kokbint

kokb.c@@/main/16

kprb.h@@/main/14

add kprbuu* (callback bind) support for ADTs

Transaction: aksrivas_bug-691448

kge.h@@/main/41

fix bug 691448, add KGENMFASSERT macro and kgeanmfe proto

kge.c@@/main/59

rix bug 691448, add named fatal assert routine

kjga.h@@/main/7

fix bug 691448, add named fatal assert macros

Transaction: hasun_handle_grpby_cols_correctly_for_mavs

kkz.c@@/main/127

 ■ Use a unique index for MAVs instead of PK constraint.

kkzg.c@@/main/28

▶ Modify kkzgindcb() to generate unique indexes for MAVs

Transaction: ramkrish_ramkrish_iotlob_atbmov

kkm.c@@/main/379

kkpo.c@@/main/40

atb.c@@/main/227

kkb.c@@/main/82

kokl2.c00/main/29

kditc.h@@/main/10

kdic.c@@/main/113

qerri.c00/main/73

prsdef.h@@/main/35

ctc.c00/main/221

kkbl.c@@/main/28

prsc.c@@/main/386

Transaction: mkamath errmsg

e<u>24280.msa@</u>@/main/73

Adding error message 25261

Transaction: sbedarka_bug-664195_1

catalog.sql@@/main/301

Transaction: sbedarka_bug-683833_1

kkdc.c@@/main/81

Transaction: sbedarka_bug-475585_1

kvpf.c00/main/11

Transaction: lkaplan sndcmp delete

ColumnDescriptor.java@@/main/6

Transaction: clei_bug-696853_1

kzra.c@@/main/8

Transaction: lbarton_bug-654891

exuevw.c@@/main/25

Use explicit array index in offsetof

Transaction: dalpern_snapshot_purity_adjustments_errmsg

e29250.msg@@/main/91

base purity decisions on DETERMINISTIC

Transaction: gtaracha bug-566533

opndef.h@@/main/124

Removing OPTHTOR and OPTATOH

odfdef.c@@/main/82

8: Fixing bug 566533

koke.h@@/main/25

(566533): Removing kokeehtr, kokeihtr

koke.c00/main/39

(566533): Removing kokeehtr, kokeihtr and OPTATOH from kokeithx

kkzp.c@@/main/24

Removing OPTHTOR and OPTATOH

Transaction: nramani_ldap_errors

e24280.msg@@/main/74

adding ldap integration errors

Out of Transaction changes:

.labellog@@/main/209

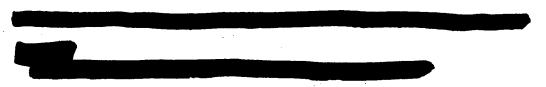
new log

.manifest@@/main/solaris/216

new label

ctc.c@@/main/222

fix comp err



```
Short regress has 0 dif - run with use ism=false.
```

```
tk0irddl.suc
               tkaqrawt.suc
                               tkoolqyi.suc
                                              tkprddls.suc
                                                              tkqrords.suc
tk0iriot.suc
               tkb2srg.suc
                               tkoommo2.suc
                                              tkprdemo.suc
                                                              tkqrsecb.suc
tk0irmts.suc
               tkdrpls1.suc
                               tkoqbrqr.suc
                                              tkprdep1.suc
                                                              tkqrsels.suc
tkaqbdq2.suc
               tkgrsecs.suc
                               tkp83c1.suc
                                              tkprdep2.suc
                                                              tkqrtres.suc
tkaqbeql.suc
               tkhodbck.suc
                               tkpasr81.suc
                                              tkprdep3.suc
                                                              tkqrwhes.suc
tkaqbeq2.suc
               tkhomrg.suc
                               tkpasrg0.suc
                                              tkprdep4.suc
                                                              tkqxeisr.suc
tkaqdqb1.suc
               tkhoucmr.suc
                               tkpbdl.suc
                                              tkprdep5.suc
                                                              tkrcrash.suc
tkaqdqb2.suc
               tkigfsrt.suc
                               tkpmsrl.suc
                                              tkprdep6.suc
                                                             tkrcrsha.suc
tkaqdqba.suc
               tkirenbs.suc
                               tkpmsrnl.suc
                                              tkprexec.suc
                                                             tkrmlite.suc
tkaqdqrc.suc
               tkirinds.suc
                               tkpopro.suc
                                              tkprmisc.suc
                                                             tkrmliti.suc
tkaqmbdq.suc
               tkoodcat.suc
                               tkpotta.suc
                                              tkprsqlp.suc
                                                             tksrsubs.suc
tkaqmbei.suc
               tkoodcta.suc
                               tkpqcafs.suc
                                              tkprtime.suc
                                                             tktrclus.suc
tkaqmnav.suc
               tkoodctn.suc
                               tkpqdups.suc
                                              tkprtimm.suc
                                                             tktrmnps.suc
tkagnsbl.suc
               tkoodtc1.suc
                               tkpqgrps.suc
                                              tkpuori.suc
                                                             tktrnaos.suc
tkaqnsb2.suc
               tkoodtci.suc
                               tkpqjois.suc
                                              tkqrcats.suc
                                                             tktrtabs.suc
tkaqnsb3.suc
               tkoodtcm.suc
                               tkpqmain.suc
                                              tkgrdats.suc
                                                             tktrvies.suc
tkaqnsb4.suc
               tkoodtir.suc
                               tkpqords.suc
                                              tkqrexps.suc
                                                             tkxabrch.suc
tkaqnsb5.suc
               tkoodxu0.suc
                               tkpqrgrs.suc
                                              tkqrgrps.suc
                                                             tkzrlso0.suc
tkaqoci2.suc
               tkoolqyc.suc
                               tkpqwhrs.suc
                                              tkqrjois.suc
tkaqrawi.suc
               tkoolqyd.suc
                               tkprbugs.suc
                                              tkqrnuls.suc
```

Long regress has been started.

Transaction: svedala fix cdemosyev

cdemosyev.c@@/main/st rdbms 8.1.4/1

Transaction: gbhatia_define_net_use_ldap_flag

s_rdbms.mk@@/main/osds/unix/solaris/st_rdbms_8.1.4/1
Define NET_USE_LDAP flag

Transaction: mtakashi_merge_jox_981022

jox.c@@/main/st_rdbms_8.1.4/8
merge from cvs

Transaction: skmishra fix-dif-4

opiodr.c00/main/st_rdbms_8.1.4/4

Out of Transaction changes:

_depprod@@/main/solaris/st_rdbms_8.1.4/15

update javavm

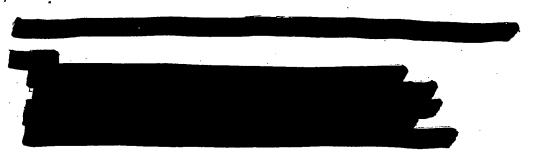
alabellog@@/main/st_rdbms_8.1.4/15

manifest@@/main/solaris/st_rdbms_8.1.4/16

: new label

rdbmsqaenv@@/main/st_rdbms_8.1.4/2

Added entries to T_SOURCE, T_COM, etc. to stay in sync with .ndeprodenv



Short regress has 0 dif - run with use ism=false.

,ore rearross	0 WII . I WII I C	450_1011 14150.		
tk0irddl.suc	tkb2srg.suc	tkoqbrqr.suc	tkprdemo.suc	tkqrsels.suc
tk0iriot.suc	tkdrpls1.suc	tkp83c1.suc	tkprdep1.suc	tkqrtres.suc
tk0irmts.suc	tkgrsecs.suc	tkpasc81.suc	tkprdep2.suc	tkqrwhes.suc
tkaqbdq2.suc	tkhodbck.suc	tkpash81.suc	tkprdep3.suc	tkqxeisr.suc
tkaqbeq1.suc	tkhosrg.suc	tkpasrg0.suc	tkprdep4.suc	tkrcrash.suc
tkaqbeq2.suc	tkhoucsr.suc	tkpbdl.suc	tkprdep5.suc	tkrcrsha.suc
tkaqdqb1.suc	tkigfsrt.suc	tkpdplipo.suc	tkprdep6.suc	tkrmlite.suc
tkaqdqb2.suc	tkirenbs.suc	tkpmsrl.suc	tkprexec.suc	tkrmliti.suc
tkaqdqba.suc	tkirinds.suc	tkpmsrnl.suc	tkprmisc.suc	tksrsubs.suc
tkaqdqrc.suc	tkoodcat.suc	tkpopro.suc	tkprsqlp.suc	tktrclus.suc
tkaqmbdq.suc	tkoodcta.suc	tkpotta.suc	tkprtime.suc	tktrmnps.suc
tkaqmbei.suc	tkoodctn.suc	tkpqcafs.suc	tkprtimm.suc	tktrnaos.suc
tkaqmnav.suc	tkoodtc1.suc	tkpqdups.suc	tkpuori.suc	tktrtabs.suc
tkaqnsb1.suc	tkoodtci.suc	tkpqgrps.suc	tkqrcats.suc	tktrvies.suc
tkaqnsb2.suc	tkoodtcm.suc	tkpqjois.suc	tkqrdats.suc	tkxabrch.suc
tkaqnsb3.suc	tkoodtir.suc	tkpqmain.suc	tkqrexps.suc	tkzrlsd0.suc
tkaqnsb4.suc	tkoodxu0.suc	tkpqords.suc	tkqrgrps.suc	tkzrlso0.suc
tkaqnsb5.suc	tkoolqyc.suc	tkpqrgrs.suc	tkqrjois.suc	•
tkaqoci2.suc	tkoolqyd.suc	tkpqwhrs.suc	tkqrnuls.suc	
tkaqrawi.suc	tkoolqyi.suc	tkprbugs.suc	tkqrords.suc	
tkaqrawt.suc	tkoommo2.suc	tkprddls.suc	tkqrsecb.suc	

Long regress has been started.

Transaction: nvishnub bug-786151

exuept.c00/main/14

Transaction: gtarora_kollasg_OCIObjectSetAttr

orid.c00/main/8

Transaction: anithrak_fix_state_obj_dump

kcb.h@@/main/167

Add new where for kcbmbl for call from kcbzps

kcbz.c00/main/149

Transaction: whe_fix_lrg31076

orl.c00/main/18

:

: lrg31076:typo in OCIOpaqueCtxGetHandles

Transaction: jfeenan merger

qsmqutl.c00/main/13

: reduce invalidation and lock window

Transaction: fge_bug-705269

qkadrv.c@@/main/256

#(705269): qkadrv projects rwo for bitmap dn if ROWNUM

qkna.c@@/main/25

#(705269): qknpxAllocate: new rwo if bitmap dn underneath

Transaction: gbhatia ano radius encrypt passwd

kpuzln.c00/main/31

: ANO Radius Fix

upilog.c@@/main/63

ANO Radius Fix

kzia.c@@/main/14

ANO Radius Fix

Out of Transaction changes:

.depprod@@/main/solaris/293

update plsql, precomp, sqlplus, ordts, oemagent

.labellog@@/main/334

new log

.manifest@@/main/solaris/341

new label